

Sub 127
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a central shaft configured to fit within the central aperture and configured to engage the wafer backside plate, the wafer backside plate being configured to automatically slide between an up position when the wafer backside plate and the shaft are spinning during rotational wafer processing and a down position when the wafer backside plate and the shaft have stopped spinning once not in rotational wafer processing, wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the up position than when in the down position.

2. An apparatus of claim 1, wherein the central shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

3. An apparatus of claim 2, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

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4. (Amended) An apparatus of claim 3, wherein the height adjustment slot includes,

a lower position; and

an upper position,

wherein the pin slides from the lower position in the height adjustment slot to the upper position in the height adjustment slot during rotational wafer processing.

5. (Amended) An apparatus of claim 3, wherein the height adjustment slot includes,

a lower position; and

an upper position,

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C4 wherein the pin slides from the upper position in the height adjustment slot to the lower position in the height adjustment slot when completing rotational wafer processing.

8. (Amended) An apparatus for preparing a wafer, comprising:
a chuck having a plurality of grippers for holding the wafer;
a wafer backside plate having a top surface, the wafer backside plate including a cylindrical edge lip that defines a central aperture;

C5 a shaft connected to a central portion of the chuck and configured to receive and engage the cylindrical edge lip of the backside plate, the wafer backside plate being configured to automatically slide between an up position when the chuck, the wafer backside plate, and the shaft are spinning during rotational wafer processing and a down position when the chuck, the wafer backside plate, and the shaft stop spinning upon completing rotational wafer processing, wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the up position than when in the down position.

9. An apparatus of claim 8, wherein the shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

10. An apparatus of claim 9, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

11. (Amended) An apparatus of claim 9, wherein the height adjustment slot includes,

C6 a lower position; and
an upper position,

wherein the pin slides from the lower position in the height adjustment slot to the upper position in the height adjustment slot during rotational wafer processing.

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12. (Amended) An apparatus of claim 9, wherein the height adjustment slot includes,

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a lower position; and

an upper position,

wherein the pin slides from the upper position in the height adjustment slot to the lower position in the height adjustment slot when completing rotational wafer processing.

15. (Amended) An apparatus for spinning, rinsing and drying a wafer, comprising:

a chuck having a plurality of wafer holders for holding the wafer during the spinning, rinsing and drying;

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a wafer backside plate having a disk-like top surface that mirrors the wafer being held by the holders above the wafer backside plate, the wafer backside plate including a cylindrical edge lip at a center, the edge lip having an inner surface that defines a central aperture;

a shaft connected to a central portion of the chuck and configured to receive and engage the inner surface of the edge lip of the backside plate, the wafer backside plate being configured to automatically slide between an up position when the chuck, the wafer backside plate, and the shaft are spinning during rotational wafer processing and a down position when the chuck, the wafer backside plate, and the shaft have stopped spinning upon completing rotational wafer processing, wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the up position than when in the down position.

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16. An apparatus for spinning, rinsing and drying a wafer as recited in claim 15, wherein the shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

17. An apparatus for spinning, rinsing and drying a wafer as recited in claim 15, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

18. (Amended) An apparatus of claim 16, wherein the height adjustment slot includes,

a lower position; and

an upper position,

wherein the pin slides from the lower position in the height adjustment slot to the upper position in the height adjustment slot during rotational wafer processing.

19. (Amended) An apparatus of claim 16, wherein the height adjustment slot includes,

a lower position; and

an upper position,

wherein the pin slides from the upper position in the height adjustment slot to the lower position in the height adjustment slot when completing rotational wafer processing.

REMARKS

The Examiner is thanked for the careful review of this application. Claims 1-5, 8-12, and 15-19 are pending after entry of the present Amendment. Claims 6, 7, 13, 14, and 20-30 were cancelled. Amendments were made to the specification to correct typographical errors.